

- %RH using wet & dry bulb temperature
- Max, Min functions for % RH
- Dew point temperature
- Two inputs for T<sub>DRY</sub> & T<sub>NET</sub>
- Input type : 4~20 mA/RTD
- 2 / 4 setpoints for %RH / T<sub>DRY</sub> / T<sub>WET</sub> / T<sub>DEW</sub> / T<sub>DIFF</sub> / Water alarm / Sensor fail
- Isolated 2 x 0/4~20 mA or 0~10 V DC retransmission outputs corresponding to %RH / T<sub>DRY</sub> / T<sub>WET</sub> / T<sub>DEW</sub> / T<sub>DIFF</sub>
- Water alarm annunciator
- 24 V DC transmitter supply
- RS485 / MODBUS RTU
- 85~265 V AC or 20~35 V DC supply

**SPECIFICATIONS** All specifications at ambient of 25 °C, unless specified otherwise

<p><b>INPUTS</b></p> <p><b>No. of inputs</b> 2 (T<sub>DRY</sub>, T<sub>WET</sub>)</p> <p><b>Transmitter supply</b> 22 V nominal, 30 mA max</p> <p><b>Range limits</b> % RH : 0 ~ 100 % RH T<sub>DRY</sub>, T<sub>WET</sub> : -20 ~ 100 °C Instrument only : ±0.5% RH Instrument with class 'A' Pt100 RTD : ±2% RH</p> <p><b>Accuracy</b></p>	<p><b>OUTPUTS</b></p> <p><b>No. of relays</b> 2 / 4</p> <p><b>Relay contact type</b> NO-C-NC</p> <p><b>Relay contact rating</b> 5A / 230V AC, resistive</p> <p><b>SSR drive</b> 12 V DC drive signal for external SSR</p> <p><b>No. of analog outputs</b> 0 / 1 / 2 (current or voltage)</p> <p><b>Current output</b> 4~20 mA / 0~20 mA / 20~4 mA / 20~0 mA isolated from input</p> <p><b>Maximum load for current output</b> 500 ohms</p> <p><b>Voltage output</b> 0~10 V / user specified</p> <p><b>Load for voltage output</b> &gt;10 Kohms</p>
<p><b>INDICATION</b></p> <p><b>Upper display</b> 4 digit, 7 segment 0.56" (14.2 mm) red LED display</p> <p>Parameters a) % RH corresponding to wet &amp; dry bulb temperature b) Peak (maximum value of %RH after power on) c) Valley (minimum value of %RH after power on)</p> <p><b>Middle display</b> 4 digit, 7 segment 0.39" (9.9 mm) green LED display</p> <p>Parameters a) Dry bulb temperature b) Setpoint 1</p> <p><b>Lower display</b> 4 digit, 7 segment 0.39" (9.9 mm) green LED display</p> <p>Parameters a) Wet bulb temperature b) Dew point temperature c) Difference between dry &amp; wet bulb temperature</p>	<p><b>COMMUNICATION</b></p> <p><b>Port</b> RS485</p> <p><b>Protocol</b> Modbus RTU</p> <p><b>Slave ID</b> User programmable (1~256)</p> <p><b>Programmable</b></p> <p>Baud rate 2400 / 4800 / 7200 / 9600 / 19200 / 38400 / 57600 bps</p> <p>Parity None, Even, Odd</p> <p>Stop bit 1, 2</p> <p>Data format Integer, Integer x 10, Float, Swapped Float</p>
<p><b>LED indicators</b></p> <p>Relay status Temperature unit indication Upper / Middle / Lower row parameter indication Communication</p>	<p><b>SENSOR</b></p> <p><b>Order code</b> 2334-01</p> <p><b>Cable length</b> 5 metres</p>

## SPECIFICATIONS All specifications at ambient of 25 °C, unless specified otherwise

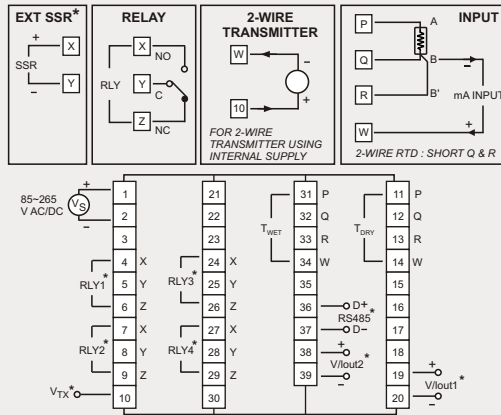
### PROGRAMMABLE PARAMETERS

<b>Input type</b>	4 ~ 20 mA / RTD
<b>Unit</b>	°C / °F for T <sub>DRY</sub> , T <sub>WET</sub>
<b>High scale / Setpoint.high limit</b>	Full range
<b>Low scale / Setpoint low limit</b>	Full range
<b>Digital Filter</b>	Off / A to E
<b>Resolution for % RH</b>	1 / 0.1
<b>Resolution for T<sub>DRY</sub>, T<sub>WET</sub></b>	1 / 0.1
<b>Bias for %RH, T<sub>DRY</sub> &amp; T<sub>WET</sub></b>	-10.0 ~ 10.0
<b>Water alarm annunciator</b>	Enable / Disable
<b>Relay / analog output assignment</b>	%RH / T <sub>DRY</sub> / T <sub>WET</sub> / T <sub>DEW</sub> / T <sub>DIFF</sub> / Water alarm / Sensor fail
<b>Setpoints</b>	Upto setpoint limits
<b>Hysteresis</b>	0.1 to 99.9
<b>Relay control logic</b>	Onoff / Time Proportional mode
<b>Relay mode</b>	Humidify / Heat Dehumidify / Cool
<b>Relay type</b>	Full scale high alarm Full scale low alarm Deviation high alarm Deviation low alarm In band alarm Out band alarm
<b>Alarm acknowledge</b>	None / Latch / Hold / Latch + Hold
<b>Relay action</b>	Key used to reset relay in Latch mode
<b>Setpoint lock</b>	Reverse / Direct
<b>Program lock</b>	ON/OFF ON/OFF

### OTHER

<b>Programming</b>	Through 3 tactile keys
<b>Dimensions (in mm)</b>	96(H) x 96(W) x 100(D)
<b>Mounting</b>	Panel mount
<b>Panel cutout</b>	92 x 92 mm
<b>Supply voltage</b>	a) 85~265 V AC, 50/60 Hz b) 20~35 V DC (optional)
<b>Power consumption</b>	4 watts maximum
<b>Operating ambient temperature</b>	0~50 °C
<b>Relative humidity</b>	Below 90%, non condensing

## CONNECTION DIAGRAM



\* - FACTORY OPTION

STK-523

## ORDERING INFORMATION

- RHC301 will be supplied with the following standard specifications :

Input	2 x Pt100, 3-wire
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- Sensor 2334-01 (with 5 metre cable) is included with the instrument

### ORDER CODE

2256	A
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A	Configuration		
	Relay	Analog output (4~20 mA)	RS485
01	2	2	0
02	4	0	0
03	4	2	0
04	4	0	1

### Ordering Options

The following ordering options are available on request. Minimum order quantity and/or minimum order value may apply.

Option	Details
1. Input	2 x 4~20 mA (with Tx supply)
2. Analog output	0~10 V DC
3. Supply voltage	20~35 V DC
4. Sensor cable length	10, 15, 20 mtrs



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### OTHER ENQUIRIES

<b>Instruments</b>	sales@radix.co.in
<b>Sensors</b>	sensors@radix.co.in
<b>Gauges</b>	gauges@radix.co.in
<b>Automation</b>	automation@radix.co.in
<b>Level</b>	level@radix.co.in